

#### United States Department of the Interior



National Park Service Christiansted National Historic Site Buck Island Reef National Monument Salt River Bay Historical Park and Ecological Preserve 2100 Church Street #100 St. Croix, Virgin Islands 00820 (340) 773-1460

May 24, 2006

To:

Allen Bohnert, Chief Curatorial Services, SERO

From:

Zandy Hillis-Starr, Chief Resource Management CAL

Subject:

CHRI Museum Checklist 2006

Enclosed is a copy of Christiansted NHS 2006 Museum Collection Storage Checklist. With the fantastic help, guidance, and assistance of Ms. Bridget Beers we were able to make a few new improvements in museum collection storage, provide some monitoring training for our interpretive staff and complete the checklist. Each year with your help and that from SEAC we continue to make improvements in the park's collection storage facility. This July will undertake a study (funded by SERO) to determine the feasibility of locating a museum storage facility on St. Croix to meet NPS Museum Standards and provide a facility that could serve both NPS and other federal and territorial partners.

We again appreciate your help and guidance. Please contact me with any questions, 340-773-1460 x 235.

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#### NATIONAL PARK SERVICE CHECKLIST FOR PRESERVATION AND PROTECTION OF MUSEUM COLLECTIONS

### CHECKLIST COVER SHEET

Please complete and attach this cover sheet to your completed checklist.	r sheet to your completed checklist.
Unit Name: Christiansted National Historic Site	Historic Site
Unit Address: 2100 Church Street, #100	#100
	(Street Address)
	(P.O. Box Number)
	Christiansted, St. Croix, VI 00820-4611
	(City, State, Zip Code)
Telephone Number: 340-773-1460	x 235 Fax Number: 340-773-2950 x
Completed by: Zandy Hillis-Starr	
(Name) Chief of Resource Management	
(Title)	
Bridget Beers	Date: 05/24/2006
(Name)  Museum Specialist	
Reviewed/Approved by: Joel Tutein	n
	Park Superintendent/Center Manager Name)  A. Xunte-  Date: Shull b
Park Superintende	ter Manager Signature)

# TABLE 1: UNIT FACILITIES HOUSING MUSEUM COLLECTIONS

S	Fort Christiansvaern - Museum Storage	4
	Fort Christiansvaern	1
U	Christiansted National Historic Site	0
Type of Museum Space	Name and Type of Facility	Facility Code

#### NATIONAL PARK SERVICE CHECKLIST FOR PRESERVATION AND PROTECTION OF MUSEUM COLLECTIONS

### FACILITY COVER SHEET

acility: 0 Christiansted National Historic Site	
∃	
Adress: 2100 Church Street, #100	
(Street Address)	
(P.O. Box Number)	
Christiansted, St. Croix, VI 00820-4611	
(City, State, Zip Code)	
elephone Number: 340-773-1460	Fax Number:
Completed by: Zandy Hillis-Starr	Date: 05/24/2006
(Name)	
Chief Resource Management	
(Title)	
Bridget A. Beers	Date: 05/24/2006
(Name)	
Museum Specialist, SEAC	
(Title)	

Facility: 0 Page: 1

05/24/2006

CHRI

(Park/Center Acronym)

Answer:

YES

## H. PROFESSIONAL ASSISTANCE AND MUSEUM PLANNING

ongoing monitoring program. humidity and temperature levels and acceptable highs and lows based on data recorded from 1. Working with museum environment specialists, the unit has established optimum relative

Deficiency:

collecting one year data temp and rel humidity are within acceptable range, although not optimum. Given current museum collection storage housing (in historic Fort Park installed an automatic temp and rel humidity datalogging device. After soldier's bastion) conditions will remain the same until better door seal is installed

Comments: Cost for equipment covered in Facilty 4 #B.14

survey, complete the deficiency and cost blocks.) (If there is no need for a security survey, 2. The unit has conducted a security survey. (If the response is NO, and there is a need for this respond NA indicating not applicable.)

Deficiency: Survey needed

Action: Security survey was contracted out FY04 and will be conducted November 2004

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected % 100

Funding spent (previous) FY

2004

18000 18000 Cost: \$

Answer:

Comments: Combined fire & security survey, reference PMIS project #96149 "Conduct completed FY05. Museum Collection Fire and Security Survey for CHRI/BUIS/SARI" will be

Survey completed and report furnished in FY05

survey, respond NA indicating not applicable.) 3. The unit has conducted a fire protection survey. (If the response is NO, and there is a need for this survey, complete the deficiency and cost blocks.) (If there is no need for a fire protection

Answer:	Percent of deficiency corrected %	estimated cost to correct deficiency \$	nding spent (previous) FY\$	Cost
<b></b>	%	<del>∽</del> 		l é
YES				

Previous

Fu

Answer:
YES

Facility: 0 Page: 2

Deficiency: Unit has not conducted a fire protection survey.

05/24/2006

(Park/Center Acronym)

			_
Percent of deficiency corrected % 100	Previous estimated cost to correct deficiency \$	Funding spent (previous) FY	Cost: \$
%	↔	<del>69</del>	₩.
100			

Fire protection specialist has been contracted to conduct fire survey November 2004. Project funded for FY04.

Comments: Reference PMIS project #96149, "Conduct Museum Collection Fire and Security Survey for CHRI/BUIS/SARI" will be completed FY 05. Survey completed and report furnished in FY05.

included in the unit's Resources Management Plan (RMP). 4. The needs of the museum collection are adequately addressed in project statements that are

Action:

Comments:

5. The unit has an approved Collection Management Plan (CMP).

Deficiency: The unit's current CMP is not adequate to meet park needs

Action: A CMP has been funded and will be carried out in FY 2003

Comments: CMP site visit in February 2003. Draft report submitted to park staff for review and comments were sent back to the regional office. Final plan in FY04

exhibit and in storage and have provided guidance on setting priorities for conservation provided the unit with an assessment of the condition of material-specific object groups on 6. Through a Collection Condition Survey (CCS) or multiple surveys, conservators have

Deficiency: The park's draft CMP (2003) recommends a CCS to identify conservation priorities collection of pre-Columbian artifacts will require a separate CCS by an material specializations in paper, textiles, and general objects. The Andersen should be accomplished by a series of surveys by conservators with specific archeological objects conservator for park collections. Because of the different materials within the collections, this

> Answer: YES

Answer:

YES

Cost: \$

Previous estimated cost to correct deficiency \$ Funding spent (previous) FY Percent of deficiency corrected % 100 03 23000 23000

Answer: NO

Cost: \$

Previous estimated cost to correct deficiency \$ Funding spent (previous) FY Percent of deficiency corrected % 2005 30 15000

Facility: 0 Page: 3 05/24/2006

> (Park/Center Acronym) CHRI

Action: Work with regional office to get names of conservator to conduct surveys, prepare

Comments: Reference PMIS project #86338 - Museum Paper Conservation Project. The treatment proposals and list supplies needed, and do the treatment of the collections

museum collection needs by contract librarian. and completed in 2005. Park library and oversized documents were assessed for conservaton of 222 oversized drawings were conserved by Harpers Ferry in 2004

Reference PMIS project #96147 Component A - Textile Survey was performed in

PMIS project number 96147 Component B - Metal Condition Survey

there is no need for a Collection Storage Plan, respond NA indicating not applicable.) a special need for this plan, independent of a CMP, complete the deficiency and cost blocks. If 7. The unit has an approved Collection Storage Plan (CSP). (If the response is NO, and there is

Deficiency: The unit does not have an approved CSP.

Work with regional office to get assistance in preparing a CSP.

Comments: FY 04 the park worked with SERO Museum Specialist to design better use of existing space for museum collection storage, but a CSP is still needed. Cost updated based on 2005 estimates in museum handbook.

8. An Integrated Pest Management Plan for all spaces housing museum collections has been

Deficiency: An IPM for spaces housing museum collections has not been written.

Write IPM for the museum collections

Comments: IPM pratices have been put into practice in museum collection storage. Cost updated based on 2005 estimates in museum handbook.

spaces. 9. A housekeeping plan has been written for museum storage, exhibit, work, and research

Answer:	
NO	

	Percent of deficiency corrected %
	Previous estimated cost to correct deficiency \$
	Funding spent (previous) FY\$
9000	Cost: \$

Answer	
NO	

Cost: \$
10000

Percent of deficiency corrected %	Previous estimated cost to correct deficiency \$	Funding spent (previous) FY	
%	<del>6</del> 9	. €⁄9	

Answer: NO

Facility: 0 Page: 4

05/24/2006

Deficiency: The park has no housekeeping plan for museum storage, exhibit, work, and research spaces.

Action: Work with regional office staff to write plan.

Comments: Cost updated based on 2005 estimates in museum handbook.

Previous estimated cost to correct deficiency \$	Funding spent (previous) FY	Cost: \$
↔	↔	₩
		10000

(Park/Center Acronym) CHRI

Percent of deficiency corrected %

## NATIONAL PARK SERVICE CHECKLIST FOR PRESERVATION AND PROTECTION OF MUSEUM COLLECTIONS

### FACILITY COVER SHEET

Facility: 1 Fort Christiansvaern		
Facility Type: Exhibit		
Address: 2100 Church Street, #100		
(Street Address)		
(P.O. Box Number)		
Christiansted, St. Croix, VI 00820-4611		
(City, State, Zip Code)		
Felephone Number: 340-773-1460	Fax Number:	
Completed by: Zandy Hillis-Starr	Date: 05/24/2006	
(Name)		
Chief Resource Management		
(Title)		
Bridget A. Beers	Date: 05/24/2006	
(Name)		
Museum Specialist, SEAC		
(Title)		

Facility: 1 Page: 1 05/24/2006	CHECKLIST by FACILITY
(Park/Center Acronym)	CHRI

#### C. EXHIBITS

Are museum collections exhibited in this facility? If the response is YES, complete this section of the checklist.

#### Operations (Procedural):

1. Exhibit plans and historic furnishings reports are reviewed by curatorial staff to ensure that the preservation, protection, and maintenance needs of museum objects are adequately addressed.

Answer:

YES .

Answer: \_

YES

Action: Review existing plans and update as needed.

Comments:

#### Museum Facility:

2. The space is outside the 100-year floodplain.

Deficiency: The collections are stored in a historic fort in which elevation is approx. 6 feet above general grade. There is no threat.

Action:

Comments:

3. The space is in an area that will not flood if pipes break, or drains back up. (If there are no pipes or drains, respond NA indicating not applicable.)

Deficiency:

Action:

Comments:

#### Equipment and Supplies:

4. Exhibit cases are designed and fabricated in a manner that ensures the security and preservation of museum property (e.g., uses tamper-resistant screws; minimizes heat build upcontrols light, relative humidity, dust levels; and prevents access by insects). (If there are no exhibit cases, respond NA indicating not applicable.)

Cost: \$	Answer:
	NO

Funding spent (previous) FY \$ Previous estimated cost to correct deficiency \$ Percent of deficiency corrected %

Answer: YES

Cost: \$

Funding spent (previous) FY \$

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Answer: YES

Answer: YES	Freestanding museum objects on exhibit are protected by physical barriers, alarm detection	7. Fre
	Comments: It has been suggested that park consider using aluminum cannon carriages, replicas of existing wooden carriages, to prolong the life of the carriages in the park's saline and tropical climate.	Comn
	tion: Work with regional staff and historic preservation specialist to determine the right type of materials to use and find contractors that specialize in fabricating these types of mounts.	Action:
Funding spent (previous) FY \$ Previous estimated cost to correct deficiency \$ Percent of deficiency corrected %		
Cost: \$ 140000	Deficiency: Park requires new mounts for cannon at Fort Christiansvaern, i.e. cannon carriages.	Defic
Answer: NO	6. Where needed, mounts constructed of museum quality material are used to support objects and specimens. (If there are no mounts, respond NA indicating not applicable.)	6. Wi and sp
	Action: Comments:	Action: Comme
Funding spent (previous) FY \$  Previous estimated cost to correct deficiency \$  Percent of deficiency corrected %		
Cost: \$	Deficiency:	Defic.
Answer: YES	5. Exhibit cases are designed and fabricated in a manner that facilitates maintenance (i.e., ease of access for inspection, inventory, cleaning, rotation of sensitive materials). (If there are no exhibit cases, respond NA indicating not applicable.)	5. Ex of acc exhibi
	Comments:	Comn
	fion:	Action:
Funding spent (previous) FY \$ Previous estimated cost to correct deficiency \$ Percent of deficiency corrected %		
Cost: \$	Deficiency:	Defic
CHRI (Park/Center Acronym)	CHECKLIST by FACILITY Facility: 1 Page: 2 05/24/2006	CHECKI Facility: 1

systems, or staff on duty. (If there are no freestanding objects, respond NA indicating not

applicable.)

Facility: 1 Page: 3

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Deficiency: 18 pound cannon and cannon balls are exhibited without barriers, however all other exhibited objects are behind metal cages secured by locks.

New locks were installed on all rooms holding exhibits to limit access by staff and ensure security for objects on display.

Comments: Cannon on exhibit are not currently protected by any kind of barriers, but installing barriers will affect the asethetic view of the exhibit.

## D. MUSEUM ENVIRONMENT

Operations (Procedural):

equipment, include equipment purchase cost in item 11.) environmental factors during each year. (If response is NO and unit does not have monitoring daily basis to provide an accurate and complete picture of all changes in both of these Levels of relative humidity and temperature in storage and exhibit spaces are monitored on a

Action: Purchase equipment, hire and train staff to take readings

Comments: Cost of equipment covered under Facility 4 #D.11

installed in May and June 2006. Equipment purchased to record temperature and relative humidity 2005. Equipment

maintained to help explain any variations in relative humidity and temperature readings conditions, leaky roof, re-calibration of equipment, or an unusual visitation pattern, is 2. A record of daily observations, noting occurrences such as unusual exterior climatic

Action: Chief of RM is responsible for monitoring daily conditions in the Fort and is Facilities. Facilities and RM work together to ensure maintenance of exhibit spaces. recording unusual conditions and impacts to exhibit spaces, as is the Chief of

Comments: Because the Fort is open to the tropical climate, except in air conditioned spaces, the park will never beable to control ambient temp and humidity.

permanently retained in the unit's curatorial files. 3. Records of relative humidity and temperature readings and of daily observations are

Answer:

NO

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(Park/Center Acronym)

Previous estimated cost to correct deficiency \$  Percent of deficiency corrected % 75  Answer: NO  Answer: YES	Funding spent (previous) FY 2004 \$	Cost: \$
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Facility: 1 Page: 4 05/24/2006

(Park/Center Acronym)

Action: Purchase equipment to take readings. Store records in curatorial files.

Comments: Equipment costs covered under Facility 4 question D.11

Equipment purchased and installed in May and June 2006.

4. Records of relative humidity and temperature readings and of daily observations are reviewed and analyzed monthly to determine relative humidity and temperature highs, lows, and means; and the frequency and extent of fluctuations.

Action: Purchase equipment and hire and / or train staff to use equipment and take readings.

Comments: Equipment costs covered under Facility 4 question D.11

One data logger purchased in 2005. Cost noted under Facility 4 question D.11. Staff trained on how to take readings.

5. The visible spectrum of light is monitored and recorded for illuminance level and duration. (If response is NO and unit does not have a light meter, include purchase cost under item 11.)

Action: Purchase equipment and hire and/ or train staff to use equipment and take readings.

Comments: Equipment purchased and staff trained on how to take readings.

6. Levels of natural light (daylight) have been recorded quarterly for one year to establish seasonal variations. (If there is no natural light in facility, respond NA indicating not applicable.)

Action: Purchase equipment and hire and/ or train staff to use equipment and take readings.

Comments: Equipment costs covered under Facility 4 question D.11

Equipment purchased and staff trained to take readings. Readings started in May 2006.

7. The unit has a record of annual seasonal variations and periodically spot checks to ensure that levels do not exceed the upper limits for sensitive objects.

Action: Hire and / or train staff to records variations and analyze data to determine if limits

Comments:

8. UV filtering material is periodically monitored to ensure its continued effectiveness in meeting the standard in the NPS Museum Handbook, Part I (Sep 90), Chapter 4. (If there is no UV filtering material, respond NA indicating not applicable.)

Answer:	Answer:	Answer:	Answer:	Answer:
NA	NO	NO	YES	NO

CHKI

(Park/Center Acronym)

Answer:

YES

Action:

Comments:

9. Monitoring (inspections) for evidence of insect, mold, and rodent infestations is conducted on an ongoing basis with especially close inspection of museum objects on a monthly basis.

Action: Interp staff and volunteers are checking for insect, mold, and rodent infestations in the exhibit and furnished rooms.

Comments: Weekly one exhibited room is cleaned and pest activities are controlled

10. The monitoring and control of pests is coordinated with the unit's Integrated Pest Management Program.

Action: Finalize IPM plan in writing.

Comments: The park has an Integrated Pest Management Program but not in writing.

#### **Equipment and Supplies:**

11. The unit has appropriate equipment (e.g., hygrothermograph, datalogger, visible light meter, UV monitor) to implement and maintain an ongoing environmental monitoring program.

Deficiency: The unit does not have appropriate equipment

Action: Purchase dataloggers with probes for exhibit and furnished rooms (4).

Comments: Cost for equipment is covered in Facility 4 question D11.

Dataloggers purchased. UV and visible light meters purchased and staff trained.

12. The park has installed equipment/system in each space housing museum collections to control relative humidity and temperature.

Deficiency: Nature of exhibits in park historic structures cannot be environmentally controlled because of nature of structure and prohibitive operating costs.

olled	Cost: \$ 2000	Õ
	Funding spent (previous) FY \$	
	Previous estimated cost to correct deficiency \$	
	Percent of deficiency corrected %	

Answer:

Z

Action: Modify existing barricades to allow for better ventillation in Commondants Day Room. Redesign door barrier with either UV coated plexiglass or Lexan ( if deem usable) for door covering with ventiliation. Replace window covering with the same

Answer: YES

Answer:

Funding spent (previous) FY \$ Previous estimated cost to correct deficiency \$

Cost: \$

Percent of deficiency corrected %

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Acronym

type of material	
al.	

Comments:

13. The visible spectrum of light is controlled to meet the standard in NPS Museum Handbook, Part I (Sep 90), Chapter 4.

Deficiency: The visible spectrum of light is not controlled.

Funding spent (previous) FY \$ \_\_\_\_\_\$

Previous estimated cost to correct deficiency \$ \_\_\_\_\_

Percent of deficiency corrected % \_\_\_\_\_

Answer:

NO

Action: Alternate screening or other window treatments could help to ameliorate light damage.

Comments:

14. Ultraviolet (UV) radiation is controlled by a filtering material that has UV absorbing properties. (If the space has no source of UV radiation, respond NA indicating not applicable).

Deficiency: UV radiation is not controlled. Fort exhibits in open air environment.

Answer: NO

Cost: \$ 2000

Funding spent (previous) FY \$ \$

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Action: Retrofit the plexiglas barriers to the Commodant's Day Room. Use UV filtered plexiglass in a form designed to allow better circulation in room.

Comments: In May 2006 started taking rmonthly UV readings.

15. Dust covers are used on open shelving when objects are not otherwise protected from dust (e.g., in boxes). (If there is no open shelving, respond NA indicating not applicable.)

Deficiency:

Answer: NA

Cost: \$

Funding spent (previous) FY \$

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Action:

Comments:

Particulates (dust) in museum storage and exhibit spaces are controlled.

Answer: NO

Facility: 1 Page: 7 05/24/2006  (Park/Center Acronym)  Deficiency: Particulates are not controlled.Fort is an open air tropical environment.  Funding spent (previous) FY \$ 5000  Previous estimated cost to correct deficiency \$	Answer:	Funding spent (previous) FY	Previous estimated cost to correct deficiency \$	Action: Comments:	2. Issuing of keys to museum storage spaces and exhibit cases is strictly controlled by the use of  Answer: YES	Deficiency: Particulates are not controlled.Fort is an open air tropical environment.  Deficiency: Particulates are not controlled.Fort is an open air tropical environment.  Action: Housekeeping is undertaken in all exhibit rooms monthly, each area is cleaned once per month. Need to install screening to keep out flying and crawling pest, but will not control particulates. Need to determine if screening is feasible in exhibit and furnished rooms.  Comments:  E. SECURITY  Operations (Procedural):  1. Keys to museum storage spaces, exhibit cases, and work and research/reference spaces are issued to only those employees having direct responsibility for the collections.  Deficiency:	C. deficier correct
Previous estimated cost to correct deficiency \$	Action: Housekeeping is undertaken in all exhibit rooms monthly, each area is cleaned once per month. Need to install screening to keep out flying and crawling pest, but will not control particulates. Need to determine if screening is feasible in exhibit and furnished rooms.  Comments:  E. SECURITY Operations (Procedural):	eeping is undertaken in all exhibit rooms monthly, each area is cleaned once th. Need to install screening to keep out flying and crawling pest, but will rol particulates. Need to determine if screening is feasible in exhibit and d rooms.  Answer:	eeping is undertaken in all exhibit rooms monthly, each area is cleaned once tth. Need to install screening to keep out flying and crawling pest, but will rol particulates. Need to determine if screening is feasible in exhibit and d rooms.  Answer: storage spaces, exhibit cases, and work and research/reference spaces are employees having direct responsibility for the collections.  Cost: \$ Funding spent (previous) FY \$	eeping is undertaken in all exhibit rooms monthly, each area is cleaned once th. Need to install screening to keep out flying and crawling pest, but will rol particulates. Need to determine if screening is feasible in exhibit and d rooms.  Answer:  Cost: \$  Funding spent (previous) FY \$  Previous estimated cost to correct deficiency \$  Percent of deficiency corrected %	ceping is undertaken in all exhibit rooms monthly, each area is cleaned once th. Need to install screening to keep out flying and crawling pest, but will rol particulates. Need to determine if screening is feasible in exhibit and d rooms.  Answer:		Previous estimated cost to correct deficiency \$
Percent of deficiency corrected %	Comments:  E. SECURITY Operations (Procedural):	storage spaces, exhibit cases, and work and research/reference spaces are employees having direct responsibility for the collections.	storage spaces, exhibit cases, and work and research/reference spaces are employees having direct responsibility for the collections.  Cost: \$	storage spaces, exhibit cases, and work and research/reference spaces are employees having direct responsibility for the collections.  Cost: \$	storage spaces, exhibit cases, and work and research/reference spaces are employees having direct responsibility for the collections.  Cost: \$		
Housekeeping is undertaken in all exhibit rooms monthly, each area is cleaned once per month. Need to install screening to keep out flying and crawling pest, but will not control particulates. Need to determine if screening is feasible in exhibit and furnished rooms.	Operations (modernment);	storage spaces, exhibit cases, and work and research/reference spaces are employees having direct responsibility for the collections.	storage spaces, exhibit cases, and work and research/reference spaces are employees having direct responsibility for the collections.  Cost: \$  Funding spent (previous) FY \$	storage spaces, exhibit cases, and work and research/reference spaces are employees having direct responsibility for the collections.  Cost: \$ Funding spent (previous) FY \$ Percent of deficiency corrected % Percent of deficiency \$ Percent of deficiency corrected % Percent of deficiency \$ Percent of deficiency corrected % Percent of deficiency corrected % Percent of deficiency \$	Storage spaces, exhibit cases, and work and research/reference spaces are employees having direct responsibility for the collections.  Cost: \$	Comments:  E. SECURITY	

Action:

Comments:

3. Written, approved procedures for controlling access to the museum collections by

non-curatorial staff, outside researchers, and visitors are implemented.

4. All researchers, visitors, and non-curatorial staff who enter the storage area are escorted at all

Answer:

NA

Answer:

YES

times by unit curatorial staff. (For exhibit spaces, respond NA indicating not applicable.)

Action:

Comments:

	acility: 1 Page: 8 05/24/2006	CHECKLIST by FACILITY
•		
	(Park/Center Acro	CHRI

Action:		

Comments:

5. A visitor/researcher sign-in log is used to record name and address of visitor, date of visit, time entered and time departed, and reason for visit. (For exhibit spaces, respond NA indicating not applicable.)

Answer:

NA

Action:

Comments:

6. Opening and closing procedures for museum spaces are written, approved and practiced.

Action:

Comments:

7. Museum objects in exhibit spaces are given additional protection at times of high risk, such as during times of crowding or of special activities. (If there are no exhibits, respond NA indicating not applicable.)

Action:

Comments:

8. The special needs of museum collections and records are incorporated into the unit's Emergency Operation Plan (EOP).

Deficiency: The unit's EOP does not currently address the special needs of museum collections and records.

Action: A museum EOP is needed.

Comments: Cost covered under Facility 4 question E.8. CMP 2003 team identified how museum collections and records need to be treated. New EOP in process and will address museum collections and archives.

9. Installed intrusion detection systems are inspected and maintained on a regular schedule to ensure that they are fully operational. (If there are no intrusion detection systems, respond NA indicating not applicable.)

Answer:

NO

	orrected %_	Percent of deficiency corrected %
	ficiency \$_	Previous estimated cost to correct deficiency \$
	<b>S</b>	Funding spent (previous) FY_
	Cost: \$	
NO	Answer:	
YES	Answer:	
YES	Answer:	

Facility: 1 Page: 9 05/24/2006

Action: Park facility and law efforcement chiefs will work with certified security specialists to fix and update current system to meet security recommendations in new plan.

Comments: Park facility chief position vacant and law efforcement chief retiring July 2006.

10. The unit has determined the extent to which museum collections and associated museum records are at risk from the threats listed in the NPS Museum Handbook, Part I (Sep 90),

Answer:

(Park/Center Acronym)

Chapters 9 and 10.

Action: Professional assistance from a security specialist is required. A security will be conducted in FY04 and will cover the risks and threats to the collections.

Comments: Suvery completed and report furnished in FY05.

#### Museum Facility:

11. Entrances to museum spaces are equipped with metal or solid-core wood doors that have deadbolt locks.

Deficiency: All museum spaces are not equipped with deadbolt locks. All doors are historic fabric that will not faciliate deadbolts.

Action: Determine better method of securing doors via a security survey.

Comments: Security survey funded for FY04. Suvery completed and report furnished in FY05.

12. Intrusion detection systems appropriate to the risks involved and to the nature of the museum collection are installed and operable in museum storage and exhibit spaces.

Deficiency: The current detection system is disarmed when the fort is open to the public. The system is not functional and needs to be fixed.

Action: Have the security survey address the detection needs in the exhibit and furnished rooms. Facility and law enforcement chiefs will contact a certified museum security specialists to design, install, and maintain updated system based on survey recommendations.

Comments: Security survey funded for FY04. Suvery completed and report furnished in FY05 Cost covered under Facility 4 question 12.

Percent of deficiency corrected %	Previous estimated cost to correct deficiency \$	Funding spent (previous) FY\$	Cost: \$	Answer: NO

Funding spent (previous) FY \$ \$ Previous estimated cost to correct deficiency \$
--

Percent of deficiency corrected %

Comments:	Action: Fix and upgrade current security and fire detection system.  Need to install additional key pads for museum storage spaces.	F. FIRE PROTECTION  Operations (Procedural):  1. Fire detection and suppression systems are inspected and maintained on a regular schedule to ensure that they are fully operational. (If unit has no fire detection of suppression systems, respond NA indicating not applicable.)	Action: Comments:		Deficiency:	14. Irreplaceable or particularly sensitive or valuable objects used in exhibits are protected in cases or by other means that provide protection from theft or vandalism, without making curatorial access impractical. (If there are none of these objects, respond NA indicating not applicable.)	Comments:	Action:		Deficiency:	Equipment and Supplies:  13. Small, highly sensitive and valuable museum objects, archival documents, and natural history type specimens housed in museum storage spaces are kept in locked cabinets with keyed or combination locks. (If there are none of these objects, respond NA indicating not applicable.)	CHECKLIST by FACILITY Facility: 1 Page: 10 05/24/2006
		Answer: NO		Funding spent (previous) FY \$  Previous estimated cost to correct deficiency \$  Percent of deficiency corrected %	Cost: \$	Answer: YES			Funding spent (previous) FY \$ Previous estimated cost to correct deficiency \$ Percent of deficiency corrected %	Cost: \$	Answer: YES	(Park/Center Acronym)

2. Fire extinguishers are inspected annually to ensure that they are operational.

Answer: YES

Facility: 1 Page: 11 05/24/2006

(Park/Center Acronym)

Action:

Comments:

Staff are trained annually in the use of fire extinguishers.

Action: Work with Facility manager to have staff trained annually.

Comments:

4. Museum objects on top of shelving or museum cabinets do not obstruct the discharge heads for fire suppression systems and are not closer than 18 inches to the ceiling. (If there is no fire suppression system, respond NA indicating not applicable.)

Action:

Comments:

5. The special needs of museum objects and museum records are incorporated in the unit's Structural Fire Plan.

Action: Facility chief will write structural fire plan for the park and include the needs of the museum collections with the assistance Chief of Resource Management.

Comments: EOP for park will include Structural Fire Plan; care of museum collections and records will be incorporated.

6. Orientation on the location, nature, significance, and specific needs of museum property has been provided to NPS and non-NPS fire fighting entities who are responsible for responding to the suppression of a fire.

Action: VI Fire Department will be involved in Nov 2004 Fire and Security Survey and become familiar with Museum needs.

Comments: Local Fire Department representatives have visited the park in order to comply with this requirement. 2-26-2001. Park Chief of Resouce management and Facilities Manager need to maintain contact with local fire department.

Museum Facility:

7. Spaces housing museum collections and their structural components (e.g., walls, floors, ceilings, doors and windows) are made fire-resistant to the extent possible, given the nature of the structure.

Answer:	Answer:	Answer:	Answer:	Answer:
YES	YES	NO	NA	NO

(Park/Center Acronym)	05/24/2006	Page: 12	Facility: 1	
CHRI		CHECKLIST by FACILITY	CHECKLIS	

nding spent (previous) FY	
<b>⇔</b>	Cost: \$

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Fu

Deficiency:

Action:

Comments:

8. Fire detection and suppression systems appropriate to the risks involved, to the nature of the museum collection, and to the structure housing the collections are installed and operable.

Deficiency: There is no fire suppression in the exhibit or furnished rooms. The current fire detection system is not working and requires servicing and upgrade.

Answer: NO

Cost: \$

Funding spent (previous) FY \$

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Action: Have a fire protection survey done to determine if it is feasible to put fire suppression in exhibit and furnished rooms, library and resource management offices. Survey completed; facility and law enforcement chiefs will work with certified consultants on obtaining, installing, and maintaining new system.

Comments: Fire and Security survey funded for FY04. Survey completed and report furnished in FY05. Results of survey state it is not feasible to put in fire suppression in the historic structure.

Equipment and Supplies:

9. An appropriate number and type of fire extinguishers are installed according to the anticipated types of fires, the nature of the collection, and the size of the protected area

Deficiency:

Action: Purchase fire extinguishers for these rooms. Place fire extinguisher in Visitor Center for immediate use.

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected % 100

Funding spent (previous) FY

2004

300 500 Cost: \$

Answer:

Comments: Fire extinguisher was placed in Visitor Center for use in Fort Christiansvaern exhibit rooms.

Cost: \$  Deficiency:  Funding spent (previous) FY \$  Previous estimated cost to correct deficiency \$  Action:	Funding spent (previous) FY \$ Previous estimated cost to correct deficiency \$ Percent of deficiency corrected %	10. Flammable liquids and materials are housed outside museum storage spaces and, regardless of where stored, such materials are housed in approved flammables storage cabinets. Cabinets are vented if required by local authorities. (For exhibit spaces, respond NA indicating not applicable.)  Deficiency:  Cost: \$  Funding spent (previous) FY  Previous estimated cost to correct deficiency corrected %  Percent of deficiency corrected %	Facility: 1 Page: 13 05/24/2006 (Park/Center Acronym)
Funding Previous estives a building above grade, the sono container or if the container			ble liquids and materials are housed outside museum storage spaces and, regardless red, such materials are housed in approved flammables storage cabinets. Cabinets f required by local authorities. (For exhibit spaces, respond NA indicating not  Cost: \$ Funding spent (previous) FY \$  Previous estimated cost to correct deficiency corrected %  Percent of deficiency corrected %

13. Magnetic media (floppy disks and tapes) that back up NPS Automated National Catalog

Answer: NA

Facility: 1 Page: 14

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stored in this facility, respond NA indicating not applicable). appropriately rated insulated records file as described in item 11. If no magnetic media are of 1700 degrees Fahrenheit. (NOTE: Media boxes are acceptable only when inserted in an of not more than 125 degrees Fahrenheit during a one hour exposure to an exterior temperature safes, media files, mixed media files, and media boxes) that will maintain an interior temperature System (ANCS) data files and other collection data files are stored in a container (e.g., media

Deficiency:

Action:

Comments:

#### G. HOUSEKEEPING

Operations (Procedural):

established schedule. 1. Housekeeping in museum storage and exhibit spaces is performed according to a plan's

Housekeeping plan was inacted FY 2004. Each exhibited room is cleaned monthly by Interp staff and volunteers making a significant difference in pest control and

object maintenance.

Comments: No official plan in writing for housekeeping of exhibits and museum storage

moving of museum objects. 2. Written rules and procedures are available to provide staff with guidance on the handling and

Action: Write rules and procedures for handling and moving museum objects with the

assistance of regional office curatorial staff.

Comments:

museum storage and exhibit spaces and in research, working, and research/reference spaces are 3. Smoking, drinking, and eating and displaying living plants, fresh flowers, and foodstuffs in prohibited in writing.

Answer:

NO

and in research, working, and research/reference spaces living plants, fresh flowers, and foodstuffs in museum storage and exhibit spaces Write procedures for the probition of smoking, drinking, and eating and displaying

Comments:

	Answer: NO	Answer: YES	Percent of deficiency corrected %	Previous estimated cost to correct deficiency \$	Funding spent (previous) FY\$	Cost: \$
;		S				

Facility: 1
Page: 15
05/24/200

CHRI
(Park/Center Acronym)

4. Relative humidity and temperature monitoring equipment is calibrated quarterly. (If there is no monitoring equipment, respond NA indicating not applicable.)

Action:

Comments:

5. If a hygrothermograph is used to monitor relative humidity and temperature, it is regularly maintained (e.g., linkage is cleaned, ink is replenished). (If a hygrothermograph is not used, respond NA indicating not applicable.)

Action:

Comments:

6. The housekeeping plan for museum spaces is reviewed annually and is revised as necessary. (If there is no housekeeping plan, respond NA indicating not applicable.)

Action:

Comments: Park does not have a housekeeping plan.

Answer:	Answer:	Answer:
NA	NA	NA

## NATIONAL PARK SERVICE CHECKLIST FOR PRESERVATION AND PROTECTION OF MUSEUM COLLECTIONS

### FACILITY COVER SHEET

Facility: 4 Fort Christiansvaern - Museum Storage Facility Type: Storage	
Address: 2100 Church St, #100 (Street Address)	
(P.O. Box Number)	
Christiansted, St. Croix, VI 00820-4611 (City, State, Zip Code)	
Telephone Number: 340-773-1460 x 235	Fax Number;
Completed by: Zandy Hillis-Starr	Date: 05/24/2006
(Name) Chief Resource Management	
(Title) Bridget A. Beers	Date: 05/24/2006
(Name) Museum Specialist, SEAC	
(Title)	

Facility: 4 Page: 1 05/24/2006

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(Park/Center Acronym)

Answer:

YES

## B. MUSEUM COLLECTIONS STORAGE

Are museum collections stored in a facility located within the unit? If the response is YES, complete this section of the checklist.

Museum Facility:

1. The museum storage area is used solely for storage of museum objects.

Deficiency: The area is not used solely for storage of museum objects. Currently museum supplies are stored in collection room.

Answer: YES

Cost: \$

Funding spent (previous) FY \_\_\_\_ \$

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Action: Buy new supply wardrobe and put in library, which is also climate controlled. Move supplies into new cabinet. Need to make room in Library to fit supply cabinet.

Comments: Handbooks and manuals were removed from collection storage in November 2003. Supply cabinet was removed from collection storage March 2005.

2. The curatorial office and research/reference and work areas are separated from the museum collections storage space.

Answer:

YES

Deficiency:

Action:

Comments:

3. Flammable liquids and materials, audiovisual equipment and other interpretive materials, and curatorial forms and supplies are stored outside the museum storage space in an appropriate cabinet

Deficiency: Curatorial supplies (not flammable liquids) are stored in museum storage space because this is the only environmentally controlled space available. Intention is to prevent conatamination (mold/mildew, pests).

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Funding spent (previous) FY

Cost: \$

YES	Answer:
	Cost: \$ Funding spent (previous) FY \$ Previous estimated cost to correct deficiency \$ Percent of deficiency corrected %

(Park/Center Acronym)	05/24/2006	Page: 2		
CHRI		IST by FACILITY	CHECKLIS	

CHRI

Action: supplies into new cabinet. Buy new supply wardrobe and put in library, which is also climate controlled. Move

Comments: Cost covered under B.14. Old supply cabinet removed from storage and put in library. Still need new cabinet for supplies.

4. The space is outside the 100-year floodplain.

Deficiency: Museum collection storage is located at an elevation of apprx. 15 feet above general grade in historic fort, there is no threat.

Percent of deficiency corrected %	Funding spent (previous) FY \$	Cost: \$	Answer: NO
-----------------------------------	--------------------------------	----------	------------

P

Action:

Comments:

pipes or drains in space, respond NA indicating not applicable.) 5. The space is in an area that will not flood if pipes break, or drains back up. (If there are no

Deficiency:

Action:

Comments:

cannot be insulated given the nature of the structure, respond NA indicating not applicable.) 6. The space is appropriately insulated to help maintain environmental conditions. (If space

Deficiency: Space is not suitably insulated.

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Funding spent (previous) FY

Answer:

YES

Cost: \$

Action: Insert plexiglass door inside entrace to museum storage room to help maintain environmental conditions.

Comments: Air conditioning and dehumidification are causing deterioration of the structure.

7. If space has windows, they are blocked (e.g., covered with plywood sheets) and insulated. (If

Answer: YES

Facility: 4	
Page: 3	CHECKLIST by Fraction 1
05/24/2006	
	4 Page: 3

Deficiency:	space has no
Deficiency: Windows are covered, but not adequately insulated and sealed.	space has no windows, respond NA indicating not applicable.)
ed.	

Comments: Windows and pipes have been sealed up. Action: Seal windows and around pipes for air conditioner.

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Funding spent (previous) FY

Cost: \$

enough to meet requirements for employee safety. 8. Space has as few doors as possible to enhance security and environmental control, but has

Deficiency:

Action:

Comments:

9. Space is as free of water, steam, drain, and fuel pipes as is practical.

Deficiency:

Action:

Comments:

monitoring and servicing by non-curatorial personnel. 10. Space is free of water, gas, or electric meters, electrical panels, and utility valves that require

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Funding spent (previous) FY

Answer:

YES

Cost: \$

Deficiency:

	The state of the s
	Percent of deficiency corrected %_
	revious estimated cost to correct deficiency \$ _
	Funding spent (previous) FY \$
	Cost: \$
YES	Answer:
	Company of the Compan
	Percent of deficiency corrected %_
	revious estimated cost to correct deficiency \$
	Funding spent (previous) FY \$
	Cost: \$
YES	Answer:

#### Comments:

11. Space is sufficient for the movement of staff, equipment, and objects in and out without hindrances (e.g., low ceilings; inadequately sized doors; or narrow, winding, or steep stairways).

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Funding spent (previous) FY

Answer:

YES

Cost: \$

Deficiency:

Action:

Comments: Additional cabinetry has condensed the space available for moving staff, equipment and objects about in the storage room. New space is needed to adequately store the collections.

12. Space is large enough to accommodate the current museum collection and any anticipated growth.

Deficiency: The current space is not large enough to house current collections. There are several architectural elements housed in a non-climate controlled room of the fort. There is no space for the antipicated collections from the Inventory and Monitoring program nor for the archives from all three parks.

Answer: NO

ral

Cost: \$ 1105000

is Funding spent (previous) FY \_\_\_\_\_ \$ \_\_\_\_\_\_

Previous estimated cost to correct deficiency \$ \_\_\_\_\_\_\_

Percent of deficiency corrected %

Action: Start planning for new collection storage building by having a Value Analysis done The value analysis will assist in determing the option available to new space. Once the VA is completed then contract with museum building specialist to design building to meet all required building codes and the requirements of NPS museum collections. Contract, build, and furnish the structure to house the collections, staff offices, research, quarantine and conservation space.

Comments: PMIS statment # 119182: Feasability study for building new multi-park and multi-agency storage facility to be conducted in July 2006.

PMIS statement # 96145: Construct Multi-park Museum collection management facility.

13. Space is organized in a way that allows for easy access to museum objects and use of proper storage equipment.

Answer: YES

CHECKLIST by FACILITY Facility: 4 Page: 5 05/24/2006  Deficiency:	CHRI  (Park/Center Ac
	Funding spent (previous) FY \$\$ Previous estimated cost to correct deficiency \$
Action:	
Comments:	
Equipment and Supplies:  14. Sufficient equipment (e.g., quantities, sizes, and appropriateness of cabinets, shelving units, and specialized racks) is used to store and contain museum objects without crowding. (If object size or type doesn't require storage equipment (e.g. vehicles), respond NA indicating not applicable.)	Answer: NO
Deficiency: Unit does not have sufficient equipment (oversized racks, cabinets, flat files, textile cabinet, etc.), plus sanitary platforms and natural history cabinets. Several draws are overcrowded with collections and are not separated by archival material.	Funding spent (previous) FY 2005 \$  Previous estimated cost to correct deficiency \$  Percent of deficiency corrected % 22
Action: Have a Collection Storage Plan (CSP) done to determine the best way to store the collections in the current space available. Purchase new equipment to house the	
collections properly.  See recommendations of 2003 draft CMP for details:  Standard specimen cabinets (35)	
Wardrobe cabinets (1) Visual storage cabinets (3)	
Map Cabinet (1)	
Media Safe (1)	
5-shelf wire shelving units (4)	
Legal-size archival document boxes (20)	
Letter-size archival document boxes (50)	
Legal acid-free file folders (7500) Lefter Acid-free file folders (7500)	
Letter Acid-Tree file folders (7000)	

81000 9300 CHRI
(Park/Center Acronym)

Map folders Muslin Fiber Fill Museum Blue Board

Hot Glue Gun and Glue

Twill Tape

Specimen Trays White Cotton Gloves

Vacuum Cleaner with variable speed and mini-tool set

Closed-cell Drawer Liners

Polyethyline Backer Rod

Acid-free Paper

Comments: Reference PMIS # 96149 Fire & Security Survey. Fire resistive file cabinet and media data safe bought for musem records and electronic data. Reference PMIS #86338 - paper conservation project. Newly purchased map cabinet installed in library. FY 2004 park purchased new museum cabinets (8), had custom cabinets made for oversized pottery (3), purchased new fire resistent file cabinets (3), pallets for architectural elements, and data media safes (3) partnering SERO and park funds. Additional archive storage supplies were purchased to re-house park docs, photos, slides, and maps.

In March 2005 three new visual display cabinets were installed to replace free standing shelving units. Eight new GL standard cabinets were moved into collection storage and two reconditioned cabinets were moved in and four degraded cabinets were moved out. Twenty three single GL cabinets and two double wide textile cabinets still need to be replaced.

End of 2005 year funds purchased two double wide cabinets and 2 standard GL cabinets. Reference PMIS statement 96103A for archival supplies for cataloging.

15. Museum storage cabinets are in good condition (e.g., are free of rust, have gaskets intact to provide good sealing action, have smoothly operating doors) and have working, keyed or combination lock mechanisms. (If object size or type doesn't require storage equipment, respond NA indicating not applicable.)

Deficiency: Most of the cabinets and the three metal shelving units all show signs of corrosion

Action: Replace cabinets and shelving units. Purchase additional shelving for architectural element storage. Hire temporary or term staff to re-house the collections.

Comments: Cost covered in B.14

Eight new GL cabinets and three visual cabinets were installed in March 2005. Two degraded cabinets were replaced with new cabinets. Two GL cabinets were replaced

Answer:	NO
Cost: \$	1.00 p. 1.00 p
Funding spent (previous) FY\$	
Previous estimated cost to correct deficiency \$	
Percent of deficiency corrected %	

cabinets. The refurbished cabinets are already showing signs of rust and will also with new cabinets and another 2 GL cabinets were replaced with refurbished

acity. (If no cabinets with drawers are used in storage, respond NA indicating not
--

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Funding spent (previous) FY

Cost: \$

Answer:

YES

Deficiency:

stacked, respond NA indicating not applicable.) 17. Museum cabinets are stacked no more than two high. (If storage contains no cabinets that are

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Funding spent (previous) FY

Answer:

YES

Cost: \$

Deficiency:

Comments:

Action:

Action:

Comments:

museum objects. (If there is no open shelving, respond 18. Open shelving is free of burrs, splinters, exposed nails,

Deficiency:

Action:

Comments:

nails, screws, and bolts that can damage	Answer: YES	YES
1 NA indicating not applicable.)		
	Cost: \$	
	Funding spent (previous) FY \$	
	Previous estimated cost to correct deficiency \$	
	Percent of deficiency corrected %	

19. Museum objects that are stacked are protected by appropriate containers or cushioning

Answer:

X

Facility: 4 Page: 8 05/2.	CHECKLIST by FACILITY
15/24/2006	
(Park/Center Acronym,	CHKI

CHRI

materials. (If no objects are stacked, respond NA indicating not applicable.)

Deficiency:

Action:

Comments:

no cabinets or shelving units, respond NA indicating not applicable.) problems. Bottom shelves of shelving units are raised off the floor 4 to 6 inches. (If facility has precaution against potential flooding and to facilitate cleaning of floors and inspection for pest 20. Museum cabinets are raised off the floor at least 4 inches (preferably 6 inches) as a

Deficiency: Some cabinets, fireproof file cabinet, and objects on floor are less than 4" off floor.

Purchase sanitary bases to raise cabinets and oversized collections off the floor.

Comments: Reference PMIS # 86338. In March 2005 new standard museum cabinets installed constructed for bell and barrell. with santiary bases. Plastic pallet put in storage for objects on floor. Movable bases

storage and base for fire proof file cabinet. New bases will be bought as standard Remaining purchase smaller pallets for remaining objects on floor in museum GL cabinets are replaced.

respond NA indicating not applicable.) 21. Open shelving is stabilized to prevent it from tipping over. (If there is no open shelving,

Deficiency:

Action:

Comments:

Percent of deficiency corrected % 75	Previous estimated cost to correct deficiency \$ 1500	Funding spent (previous) FY 2004 \$ 337	Cost: \$1162	Answer: NO	Percent of deficiency corrected %	Previous estimated cost to correct deficiency \$	Funding spent (previous) FY \$	Cost: \$
	00	37	62					

Previous estimated cost to correct deficiency Funding spent (previous) FY Cost: \$

Answer:

Percent of deficiency corrected %

Answer: O

The unit is outside of an earthquake zone.

(Park/Center Acronym)

Action:

Comments:

23. Restraining bars or cords are attached to edges of shelves to prevent objects from falling off shelves during an earthquake. (If your response to item 22 is YES, respond NA indicating not applicable.)

Deficiency: New glass front cabinets are not secured.

Action: Park purchase new custom shelving, enclosed shelves with glass fronts, for oversized pottery. Shelving will stablize storage of pottery and prevent objects from falling off shelves.

Comments: New glass front cabinets were installed in March 2005. Cabinets require bracing for earthquake damage control.

Glass front cabinets have been secured using vibration control restraining straps on July 2005.

24. Closed cell polyethylene foam is used in museum cabinet drawers and on shelving to cushion objects. (Exception: If natural history specimens are to be used for analysis of organic chemicals, do not use any kind of plastic in storage containers and respond NA.)

Deficiency: Cabinet drawers and shelving units are not lined with foam.

Action: Purchase foam sheeting and hire temporary or term museum technician to rehouse the collections.

Comments: Costs covered under B.14. Some of the foam required was purchased in FY03. Newly installed and replaced standard storage cabinets had foam drawer liners put in March 05. Majority of cabinets still need foam drawer liners.

25. Objects in museum cabinets are placed in specimen trays, padded or otherwise prevented from shifting when drawers are opened and closed. (If no cabinets with drawers are used, respond NA indicating not applicable.)

Answer:

ON

Percent of deficiency corrected %	Cost: \$							Percent of deficiency corrected % 90	Previous estimated cost to correct deficiency \$	Funding spent (previous) FY\$	Cost: \$		Answer: 123
	Funding spent (previous) FY \$		Answer:	A	Answer:	Answer:  Cost: \$	Answer:  Cost: \$	Answer:	Cost: \$	90			
Previous estimated cost to correct deficiency \$		Cost: \$							Percent of deficiency corrected % 90  Answer: NO  Cost: \$	6, 90			900

Percent of deficiency corrected %	
Previous estimated cost to correct deficiency \$	
Funding spent (previous) FY\$	
Cost: \$	Deficiency:
Answer: YES	27. Natural history specimens stored in fluids are housed in a space that provides appropriate ventilation. (If there are no specimens stored in fluids, respond NA indicating not applicable.)
	rehouse the collections.  Comments: Costs covered under B.14. Reference PMIS 86338 Paper Conservation Project.  Archival supplies purchased for rehousing paper collections. Reference PMIS 96103A NH Archives Cataloging. Archival collections were rehoused during the cataloging of NH collections in June 2005. Slide collections are being filed into archival sheets and stored in archival binders.
	Action: Purchase archival supplies and hire temporary or term museum technician to
Funding spent (previous) FY \$  Previous estimated cost to correct deficiency \$  Percent of deficiency corrected % 20	storage containers.
Cost: \$	Deficiency: Majority of collection is housed in non-archival materials or not in correct type of
Answer: NO	26. Museum objects and archival materials are housed in storage containers or on mounts (e.g., boxes, folders, envelopes, herbarium paper) that are made of museum/archival quality materials. (If there are no objects or archival materials that need such containers or mounts, respond NA indicating not applicable.)
	Comments: Costs covered under B.14.
	Action: Purchase foam sheeting and trays, and hire temporary or term museum technician to
Previous estimated cost to correct deficiency \$  Percent of deficiency corrected %	
Funding spent (previous) FY \$	moving.
Cost: \$	Deficiency: Objects (most) are in trays without padding and commonly are not prevented from

Action:

Comments: As of January 2006 natural history collections stored in fluid present in the park.

cility: 4	Page: 11 05/24/2006	(Park/Center Acron
	Collection is stored in vented fire proof cabinet.  The park does have interpretative collections stored in fluid that need proper housing.	
28. Natura collection	28. Natural history specimens stored in fluids are housed separately from dry specimen collections. (If there are no specimens stored in fluids, respond NA indicating not applicable.)	Answer: YES
Deficiency:	y:	Cost: \$
		Funding spent (previous) FY \$  Previous estimated cost to correct deficiency \$  Percent of deficiency corrected %
Action: Comment	Action:  Comments: Wet specimens are stored separately in a fire proof cabinet.	
29. Nitrate and stored is no nitra	29. Nitrate film is housed in buffered sleeves or envelopes, placed in Ziplock polyethylene bags, and stored in appropriate frost-free freezers in separate space from all other collections. (If there is no nitrate film, respond NA indicating not applicable.)	Answer: NA
Deficiency:	y:	Cost: \$
		Previous estimated cost to correct deficiency \$  Percent of deficiency corrected %
Action: Comments:	S:	
30. Spaces : pesticides, 1 appropriate applicable.)	30. Spaces and/or cabinets housing specimens stored in fluids, specimens treated with pesticides, rocks/minerals/fossils that are radioactive, or nitrate film are identified by appropriate health/safety sign. (If there are none of these materials, respond NA indicating not applicable.)	Answer: YES
Deficiency:	y:	Cost: \$
		Funding spent (previous) FY \$ Previous estimated cost to correct deficiency \$ Percent of deficiency corrected %

Action:

Comments:

Facility: 4 Page: 12 05/24/2006

(Park/Center Acronym)

# D. MUSEUM ENVIRONMENT

Operations (Procedural):

1. Levels of relative humidity and temperature in storage and exhibit spaces are monitored on a daily basis to provide an accurate and complete picture of all changes in both of these environmental factors during each year. (If response is NO and unit does not have monitoring equipment, include equipment purchase cost in item 11.)

Action: Purchase dataloggers and environment software to record and analyze data.

Datalogger recording temp and relative humidity has been installed. Temp/rel

humidity recorded twice per day.

Comments: Datalogger was installed November 2002 and data is down loaded every three

months.

2. A record of daily observations, noting occurrences such as unusual exterior climatic conditions, leaky roof, re-calibration of equipment, or an unusual visitation pattern, is maintained to help explain any variations in relative humidity and temperature readings.

Action: Chief RM records climatic conditions weekly and inspects collections storage weekly and during unusual events to ensure safety of collections.

Comments: The Division of Resource Management records unusual weather patterns.

3. Records of relative humidity and temperature readings and of daily observations are permanently retained in the unit's curatorial files.

Action: Hire and train staff to record relative humidity and temperature readings. Store records in curatorial files.

Comments: Datalogger was installed November 2002 and data is down loaded every three months and stored in the curatorial files.

4. Records of relative humidity and temperature readings and of daily observations are reviewed and analyzed monthly to determine relative humidity and temperature highs, lows, and means; and the frequency and extent of fluctuations.

Action: Purchase equipment to take readings, hire and/ or train staff to interpret the data. Comments: Datalogger was installed November 2002 and data is down loaded every three months. Because of staff limits relative humidity and temperature are reviewed every three months.

5. The visible spectrum of light is monitored and recorded for illuminance level and duration. (If response is NO and unit does not have a light meter, include purchase cost under item 11.)

Answer:	<b>≨</b>	Answer:	Answer:	Answer:
YES	YES	YES	YES	YES

Facility: 4 Page: 13 05/24/2006

(Park/Center Acronym)

Action: Purchase equipment and hire and/or train staff to take the required readings. Comments: Equipment purchased to take readings. Staff need to be trained on how to use the

equipment. Staff trained in May 2006 to take readings.

6. Levels of natural light (daylight) have been recorded quarterly for one year to establish seasonal variations. (If there is no natural light in facility, respond NA indicating not applicable.)

Action:

Comments: The only natural light in the storage facility comes when the entrance door is opened or closed. The light does not enter the facility it is only present in the doorway.

7. The unit has a record of annual seasonal variations and periodically spot checks to ensure that levels do not exceed the upper limits for sensitive objects.

Action: Hire and / or train staff to record annual seasonal variations and spot check to ensure that levels have not exceeded upper limits for sensitive objects.

Comments:

8. UV filtering material is periodically monitored to ensure its continued effectiveness in meeting the standard in the NPS Museum Handbook, Part I (Sep 90), Chapter 4. (If there is no UV filtering material, respond NA indicating not applicable.)

Action:

Comments: Equipment purchased to take readings. Staff trained on how to use the equipment. UV shielding sleeves obtained from SEAC. installed and tested for effectiveness May 2006.

9. Monitoring (inspections) for evidence of insect, mold, and rodent infestations is conducted on an ongoing basis with especially close inspection of museum objects on a monthly basis.

Action: Chief RM conducts monthly inspection for museum pests and mildew on museum collections.

Comments: As of November 2002 insect traps are checked by the Chief of Resource Management monthly.

10. The monitoring and control of pests is coordinated with the unit's Integrated Pest Management Program.

Answer:

YES

yun -	Answer:	Answer:	Answer:
YES	YES	NO	NA

Facility: 4 Page: 14 05/24/2006

Action: Finalize IPM plan in writing.

Comments: The park has an Integrated Pest Management Program but not in writing

### Equipment and Supplies:

11. The unit has appropriate equipment (e.g., hygrothermograph, datalogger, visible light meter, UV monitor) to implement and maintain an ongoing environmental monitoring program.

Deficiency: Park does not have adequate light or environmental monitoring equipment

Action: Purchase two dataloggers and software, UV and visible light monitors.

Comments: Half the dataloggers purchased with end of year money. UV and light meters puchased.

12. The park has installed equipment/system in each space housing museum collections to control relative humidity and temperature.

Deficiency:

Action: Park installed new air conditioning system and dehumidifier for collection storage.

Also electrial hookup for backup generator was installed for use in the event of

extended (24 hour) power outage resulting from hurricane or other outage

Comments: Corrections were made to HVAC system in FY 2002. Dedicated 5000 watt generator made available to Museum Collection Storage August 2004.

13. The visible spectrum of light is controlled to meet the standard in NPS Museum Handbook, Part I (Sep 90), Chapter 4.

Deficiency: Visible light is not controlled. No equipment to determine current levels.

Action: Purchase equipment and determine current levels of visible light. If it is outside NPS standards further corrections will be made.

Answer: NO

(Park/Center Acronym)

Cost: \$ 2000

Funding spent (previous) FY 2005 \$ 2847

Previous estimated cost to correct deficiency \$ 6000

Percent of deficiency corrected % 80

Answer: YES

Cost: \$

Funding spent (previous) FY 2004 \$ 1000
Previous estimated cost to correct deficiency \$ 30000
Percent of deficiency corrected %

Answer: YES

Cost: \$

Funding spent (previous) FY \_\_\_\_\_\$ \_\_\_\_\_

Previous estimated cost to correct deficiency \$ \_\_\_\_\_\_

Percent of deficiency corrected % \_\_\_\_\_\_

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(Park/Center Acronym)

Comments: Equipment purchased to take readings. Staff trained on how to use the equipment. Lights are only when staff are working with collections.

14. Ultraviolet (UV) radiation is controlled by a filtering material that has UV absorbing properties. (If the space has no source of UV radiation, respond NA indicating not applicable)

Answer:

YES

Deficiency: All fluourescent lighting is not filtered.

ction: Purchase UV sleeves for light fixtures.

Comments: No equipment to determine UV raditiation levels or staff to take the readings.

August 2005 equipment was purchased to take readings. Staff trained on how to use the equipment. UV sleeves obtained from SEAC for flourescent bulbs and installed in May 2006.

15. Dust covers are used on open shelving when objects are not otherwise protected from dust (e.g., in boxes). (If there is no open shelving, respond NA indicating not applicable.)

Deficiency:

Action: New custom shelving was purchased to replace open shelving units.

Comments: Reference PMIS 86338. Custom glass front shelving will eliminate the dust problem for the oversized pots. Shelving replaced with cabinets in March 2005.

One new open shelf unit has dust cover.

Particulates (dust) in museum storage and exhibit spaces are controlled.

Deficiency: Particulates are not controlled in deterioration of room ceiling.

Action: Perform house keeping on a regular basis. Vaccum ceiling with HEPA type vaccum cleaner.

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Funding spent (previous) FY

Answer:

Z

Cost: \$

Percent of deficiency corrected %	Funding spent (previous) FY 2004 \$	Cost: \$	Answer: YES					Percent of deficiency corrected %	Previous estimated cost to correct deficiency \$	Funding spent (previous) FY \$
		Funding spent (previous) FY 2004 \$	Cost: \$ Funding spent (previous) FY 2004 \$		Answer: YES  Cost. \$  Funding spent (previous) FY 2004 \$					
				Previous estimated cost to correct deficiency \$	Previous estimated cost to correct deficiency \$  Percent of deficiency corrected %	Previous estimated cost to correct deficiency \$  Percent of deficiency corrected %	Funding spent (previous) FY \$  Previous estimated cost to correct deficiency \$  Percent of deficiency corrected %	Funding spent (previous) FY \$ Previous estimated cost to correct deficiency \$		

(Park/Center Acronym)

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Comments: Need new appropriate space for museum collection storage space.

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Operations (Procedural):

1. Keys to museum storage spaces, exhibit cases, and work and research/reference spaces are issued to only those employees having direct responsibility for the collections.

Deficiency:

Previous estimated cost to correct deficiency \$ \_\_\_\_\_\_

Percent of deficiency corrected % \_\_\_\_\_\_

Answer:

YES

Cost: \$

Action:

Comments:

2. Issuing of keys to museum storage spaces and exhibit cases is strictly controlled by the use of a signed hand receipt (e.g., DI-105 or equivalent form).

Action:

Comments:

3. Written, approved procedures for controlling access to the museum collections by non-curatorial staff, outside researchers, and visitors are implemented.

Action

Comments: Park has procedures that need to be reviewed and updated.

4. All researchers, visitors, and non-curatorial staff who enter the storage area are escorted at all times by unit curatorial staff. (For exhibit spaces, respond NA indicating not applicable.)

Action:

Comments

5. A visitor/researcher sign-in log is used to record name and address of visitor, date of visit, time entered and time departed, and reason for visit. (For exhibit spaces, respond NA indicating not applicable.)

Answer: YES

Answer:

YES

Answer: YES

Answer: YES

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Comments:

6. Opening and closing procedures for museum spaces are written, approved and practiced.

Answer:

YES

Answer:

N

Action:

Comments:

as during times of crowding or of special activities. (If there are no exhibits, respond NA 7. Museum objects in exhibit spaces are given additional protection at times of high risk, such indicating not applicable. For storage spaces, respond NA indicating not applicable.)

Action:

Comments:

Emergency Operation Plan (EOP). 8. The special needs of museum collections and records are incorporated into the unit's

Deficiency: Special needs are not present in an approved EOP and are only generally mentioned in the park's Hurricane Plan.

Action: Write updates to the EOP and Hurricane plan for museum objects with the assistance of regional staff.

Comments: CMP 2003 team identified how museum collections and records need to be treated will also include structural fire plan. A hurricane plan was prepared in FY05 New EOP in process and will address museum collections and archives. The EOP

9. Installed intrusion detection systems are inspected and maintained on a regular schedule to ensure that they are fully operational. (If there are no intrusion detection systems, respond NA indicating not applicable.)

Answer:

NO

Park facility and law efforcement chiefs to work with certified security specialists to fix and update current system to meet security recommendations in new plan.

Comments: Park facility chief position vacant and law efforcement chief retiring July 2006.

records are at risk from the threats listed in the NPS Museum Handbook, Part I (Sep 90), Chapters 9 and 10. 10. The unit has determined the extent to which museum collections and associated museum

	The state of the s
	Percent of deficiency corrected %
	Previous estimated cost to correct deficiency \$
	Funding spent (previous) FY \$
10000	Cost: \$
NO	Answer:

Answer: YES

Facility: 4 Page: 18 05/24/2006

(Park/Center Acronym)

Comments: Security survey funded for FY04. Survey will be conducted in November 2004. Conduct security survey to deterine the risks and threats to the collection.

Survey completed and report furnished in July 2005.

### Museum Facility:

deadbolt locks Entrances to museum spaces are equipped with metal or solid-core wood doors that have

Deficiency: Door is solid with heavy duty (fortification) historic hardware.

Comments: Putting a deadbolt on the historic door is not feasible. This will be reviewed in Determine better method of securing doors via a security survey. FY04 with the Fire and Security survey and at that time it will be decided if Install interior door for improving security and environmental control.

deadbolts are appropriate or not. Installation of internal door will have dead bolt feature

collection are installed and operable in museum storage and exhibit spaces 12. Intrusion detection systems appropriate to the risks involved and to the nature of the museum

Deficiency: The system is not functional and needs to be fixed and/or upgraded or replaced. entire detection system is disarmed. Intrusion detection system is not adequate. When the fort is open to the public, the

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Funding spent (previous) FY

Cost: \$

80000

Action: on survey recommendations. Facility and law enforcment chiefs work with regional staff to contract with certified museum security specialists to design, install, and maintain updated system based

Comments: Security survey funded for FY04. Suvery completed and report furnished in FY05

### Equipment and Supplies:

or combination locks. (If there are none of these objects, respond NA indicating not applicable.) history type specimens housed in museum storage spaces are kept in locked cabinets with keyed 13. Small, highly sensitive and valuable museum objects, archival documents, and natural

No	Funding spent (previous) FY\$Previous estimated cost to correct deficiency \$Percent of deficiency corrected %Answer:
	Cost: \$
C	Answer

Answer:	
YES	

CHECKLIST by FACILITY Facility: 4 Page: 19 05/24/2006	Park/Center Acronym
Deficiency:	Cost: \$
	Funding spent (previous) FY \$  Previous estimated cost to correct deficiency \$  Percent of deficiency corrected %
Action:	Live delityry and the second second
Comments:	
14. Irreplaceable or particularly sensitive or valuable objects used in exhibits are protected in cases or by other means that provide protection from theft or vandalism, without making curatorial access impractical. (If there are none of these objects, respond NA indicating not applicable.)	Answer: YES
Deficiency:	Cost: \$
	Previous estimated cost to correct deficiency \$  Percent of deficiency corrected %
Action:	
F. FIRE PROTECTION  Operations (Proceedural):	
1. Fire detection and suppression systems are inspected and maintained on a regular schedule to ensure that they are fully operational. (If unit has no fire detection of suppression systems, respond NA indicating not applicable.)	Answer: NO
Action: Facility and law enforcment chiefs work with local security company to have the system inspected and maintained on regular basis. Fix and upgrade current system.  Comments: To be re-assessed in FY04 Fire/Security Survey.	
<ol> <li>Fire extinguishers are inspected annually to ensure that they are operational.</li> <li>Action:</li> <li>Comments:</li> </ol>	Answer: YES
3. Staff are trained annually in the use of fire extinguishers.	Answer: YES

### (Park/Center Acronym)

#### Action:

Comments: Chief of Resource Manangement and the Superintendent are the only staff with access to the storage facility and have had fire extinguisher training. Work with facility manager to have staff trained annually in the use of fire extinguishers.

4. Museum objects on top of shelving or museum cabinets do not obstruct the discharge heads for fire suppression systems and are not closer than 18 inches to the ceiling. (If there is no fire suppression system, respond NA indicating not applicable.)

Action:

Comments:

5. The special needs of museum objects and museum records are incorporated in the unit's Structural Fire Plan.

Answer:

Z

Answer:

NA

Action: Facility chief will write the structural fire plan for the park and include the needs of the museum collections with the assistance Chief of Resource Management.

Comments: EOP for park will include Structural Fire Plan; care of museum collections and records will be incorporated.

6. Orientation on the location, nature, significance, and specific needs of museum property has been provided to NPS and non-NPS fire fighting entities who are responsible for responding to the suppression of a fire.

Answer:

YES

Action: During FY 05 Fire and Security survey local fire dept will be familiarized with park museum collection special needs.

Comments: Local fire fighting representatives visited the park in order to comply with this requirement. 2/26/2001. Park Chief of Resouce management and Facilities Manager need to maintain contact with local fire department.

Museum Facility:

7. Spaces housing museum collections and their structural components (e.g., walls, floors, ceilings, doors and windows) are made fire-resistant to the extent possible, given the nature of the structure.

Deficiency:

Answer:
YES

Percent of deficiency corrected %
Previous estimated cost to correct deficiency \$
Funding spent (previous) FY \$
Cost: \$

Action:

#### Comments:

8. Fire detection and suppression systems appropriate to the risks involved, to the nature of the museum collection, and to the structure housing the collections are installed and operable.

Deficiency: Fire detection is not adequate and fire suppression is not installed. The current fire detection system is not working and requires servicing and upgrade.

Funding spent (previous) FY \$

Previous estimated cost to correct deficiency \$

Percent of deficiency corrected %

Answer:

NO

Action: As part of the fire protection survey determine if fire suppression is feasible in the rooms that have museum collections. Survey completed; facility and law enforcement chiefs will work with certified consultants on obtaining, installing, and maintaining new system.

Comments: Fire and Security survey funded for FY04. Suvery completed and report furnished in FY05. Results of survey state it is not feasible to put in fire suppression in the historic structure.

### Equipment and Supplies:

9. An appropriate number and type of fire extinguishers are installed according to the anticipated types of fires, the nature of the collection, and the size of the protected area.

Deficiency:

#### Comments:

Action:

10. Flammable liquids and materials are housed outside museum storage spaces and, regardless of where stored, such materials are housed in approved flammables storage cabinets. Cabinets are vented if required by local authorities. (For exhibit spaces, respond NA indicating not applicable.)

Deficiency:

YES	Answer:
	Percent of deficiency corrected %
	Previous estimated cost to correct deficiency \$ _
	Funding spent (previous) FY\$
	Cost: \$
YES	Answer:

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%	Percent of deficiency corrected %
<del>5/9</del>	Previous estimated cost to correct deficiency \$
€-9	Funding spent (previous) FY
   -	

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(Park/Center Acronym)

Action:

Comments:

11. All paper museum records are kept in a locking, insulated safe, file, or vault with equivalent or better protection that will maintain an interior temperature of less than 350 degrees Fahrenheit during a one-hour exposure to exterior temperatures of at least 1700 degrees Fahrenheit. (If no paper museum records are stored in this facility, respond NA indicating not applicable).

Deficiency:

Action: New fire resistive file cabinet and data media safe were purchased by SERO and park funds in FY2004.

Comments: Fire proof cabinet and data media safe installed in March 2005.

12. If the container described in item 11 is housed on a level of a building above grade, the container also is rated to withstand a drop of 30 feet. (If there is no container or if the container is housed below grade, respond NA indicating not applicable.)

Deficiency:

Action:

Percent of deficiency corrected %

Answer:

YES

Comments:

13. Magnetic media (floppy disks and tapes) that back up NPS Automated National Catalog System (ANCS) data files and other collection data files are stored in a container (e.g., media safes, media files, mixed media files, and media boxes) that will maintain an interior temperature of not more than 125 degrees Fahrenheit during a one hour exposure to an exterior temperature of 1700 degrees Fahrenheit. (NOTE: Media boxes are acceptable only when inserted in an appropriately rated insulated records file as described in item 11. If no magnetic media are stored in this facility, respond NA indicating not applicable).

	Previous estimated cost to correct deficiency \$
	Funding spent (previous) FY\$ _
And American Control of the Control	Cost: \$
YES	Answer:
	Percent of deficiency corrected %
	Previous estimated cost to correct deficiency \$_
	Funding spent (previous) FY\$
	Cost: \$
YES	Answer:

Facility: 4 Page: 23 05/24/2006

Deficiency:

Action: Park purchase fire resistive data media safe to store collection data.

Comments: Park purchased several data media vaults for RM as well as a data media safe.

### G. HOUSEKEEPING

Operations (Procedural):

1. Housekeeping in museum storage and exhibit spaces is performed according to a plan's established schedule.

Action: Chief of RM performs monthly housekeeping for museum collections however this does not adequately address the need for additional museum technical staff to

perform these tasks weekly.

Comments: No official plan in writing for housekeeping of exhibits and museum storage.

2. Written rules and procedures are available to provide staff with guidance on the handling and moving of museum objects.

Action: Write rules and procedures for handling and moving museum objects with the assistance of regional office curatorial staff.

Comments:

3. Smoking, drinking, and eating and displaying living plants, fresh flowers, and foodstuffs in museum storage and exhibit spaces and in research, working, and research/reference spaces are prohibited in writing.

Action: Write prohibition policy for smoking, drinking, and eating and displaying living plants, fresh flowers, and foodstuffs in museum storage and exhibit spaces and in research, working, and research/reference spaces.

Comments: New sign posted in museum storage on prohibited activities.

4. Relative humidity and temperature monitoring equipment is calibrated quarterly. (If there is no monitoring equipment, respond NA indicating not applicable.)

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(Park/Center Acronym)

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Anewer: NA	Answer: YES	Answer: NO	Answer: YES	Funding spent (previous) FY \$   Previous estimated cost to correct deficiency \$   Percent of deficiency corrected %

Facility: 4 Page: 24 05/24/2006

CHRI
(Park/Center Acronym)

Action:

Comments:

5. If a hygrothermograph is used to monitor relative humidity and temperature, it is regularly maintained (e.g., linkage is cleaned, ink is replenished). (If a hygrothermograph is not used, respond NA indicating not applicable.)

Action:

Comments:

6. The housekeeping plan for museum spaces is reviewed annually and is revised as necessary. (If there is no housekeeping plan, respond NA indicating not applicable.)

Action:

Comments: Park does not have a housekeeping plan.

Answer:	Answer:
NA	AN